

**IN THE U.S. DISTRICT COURT
FOR THE EASTERN DISTRICT OF MISSOURI
EASTERN DIVISION**

PAMELA S. KARL,)	
)	
Plaintiff,)	
v.)	
)	Cause No. 4:02CV01665JCH
SEARS, ROEBUCK AND COMPANY,)	
)	
Defendant.)	

**PLAINTIFF'S RESPONSE TO DEFENDANT'S STATEMENT OF UNDISPUTED
FACTS AND MEMORANDUM IN OPPOSITION TO DEFENDANT'S
DAUBERT/SUMMARY JUDGMENT MOTION**

COMES NOW Plaintiff, Pamela S. Karl, by and through her undersigned counsel, and for her Response to Defendant's Statement of Undisputed Facts and Memorandum in Opposition to Defendant's *Daubert*/Summary Judgment¹ Motion, states to the Court as follows:

Introduction

The Defendant in this matter, Sears, sells a product commonly known as a leaf blower/vacuum. This leaf blower/vacuum has a guard cover that, when opened, exposes the user of the product to rapidly spinning impeller blades used to suck up and mulch leaves. On or about August 6th, 2000, while Plaintiff was using a leaf blower she purchased from Sears, the inlet cover guard failed to remain closed and Plaintiff's hand entered the motor chamber. The impeller blades of the motor ripped a ligament in Plaintiff's thumb away from the bone, ultimately requiring Plaintiff to undergo surgery to reattach the ligament.

¹ Defendant has styled its Motion "Joint Combined 'Daubert'/Summary Judgment Motions/Memorandum on the Issue of Design Defect and to Strike Plaintiff's Expert". For purposes of this response, Plaintiff will refer to Defendant's Motion as its "Daubert/Summary Judgment" motion.

Plaintiff retained the services of S. Melville McCarthy, a mechanical engineer with over thirty years of forensic product analysis and expertise, to examine the product in question and determine whether or not the product is unreasonably dangerous. Mr. McCarthy concluded that the product was defective, based on several design defects in the product:

1. The guard cover utilizes a small screw to keep the guard cover closed. It is reasonably foreseeable that the screw will either vibrate loose over time, or that an ordinary user will forget to replace it. The missing screw is not likely to be noticed as it is small and the same color as the guard cover;
2. The guard cover opens in a manner such that it will fall open, rather than shut, when the screw is missing;
3. The electric motor driving the impeller blades continues to operate even when the guard cover is open. This could be prevented by the use of an electrical interlock switch; and
4. The motor and blades could be moved away from the air inlet opening to limit the ability of the user's hands from contacting the blades.

Sears argues that Mr. McCarthy is not qualified to render these opinions in this matter and, in addition, that his opinions are unsupported. As will be shown below, Mr. McCarthy is eminently qualified to render these opinions and his opinions are well supported by the evidence in this case. Finally, Sears' motion fails to provide any legal basis for excluding the testimony of Mr. McCarthy or for entering summary judgment in favor of Sears. Accordingly, this Court should deny Sears' motion.

Facts

Plaintiff notes that the format of Sears' motion makes it difficult to determine what Sears is asserting are the undisputed material facts in this matter due to Sears' incorporation of the "undisputed" facts into the body of its motion and combining this motion with what appears to be a *Daubert* based motion as well. Nonetheless, Plaintiff will respond to paragraphs one through sixty of Sears' motion as it appears that these paragraphs are what Sears is asserting are the undisputed material facts in this matter.

Response to Sears Asserted Undisputed Facts

1. Admitted.
2. Admitted.
3. Admitted.
4. Denied. Sears cites the deposition testimony of Mr. McCarthy where Mr. McCarthy was asked whether or not he has consulted on how to design yard or lawn equipment, in which he testified he has not. Sears in its statement of facts states that he has not been consulted on the design "... on the design of a piece of yard equipment, lawn equipment, or any kind of equipment intended to be sold to consumers." While Mr. McCarthy has not been consulted on how to design yard and lawn equipment, he has consulted on over 2000 forensic product projects, many of which involved the issue of whether or not a product has been properly designed to prevent injury. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶6.*
5. Denied. The deposition testimony attached by Sears does not discuss whether or not Mr. McCarthy has any specialized training in lawn and garden equipment. Mr. McCarthy has a mechanical engineering degree, 30 years of experience as a design

and forensic engineer, and has consulted on over 2000 forensic projects. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶6.*

6. Admitted.

7. Admitted.

8. Denied. The question of Mr. McCarthy asked by Sears referred to “lawn work,” not lawn equipment.

9. Admitted.

10. Denied. The question asked of Mr. McCarthy during his deposition was “[a]re you a member or associated with any recognized or reputable testing facility or lab” not whether or not Mr. McCarthy was ever associated with a testing facility or lab.

11. Denied. Mr. McCarthy may have been asked by a manufacturer to do testing. *Exhibit 2, Deposition of Mel McCarthy, p. 32.*

12. Denied. The question asked of Mr. McCarthy during his deposition was “[y]ou don’t hold yourself out as an expert in the evaluation and testing of products” not whether or not he has ever held himself as an expert in both evaluation and testing of products.

13. Denied. Mr. McCarthy examined photographs of the leaf blower prior to rendering his opinions and also reviewed the user’s manual. He also physically examined the product (which was located in St. Louis, Missouri) prior to giving his deposition testimony. *Exhibit 1, Affidavit of Mel McCarthy, ¶15.*

14. Denied. Mr. McCarthy operated the blower prior to giving his deposition testimony. *Exhibit 2, Deposition of Mel McCarthy, p. 18.*

15. Admitted.

16. Denied. The question asked of Mr. McCarthy during his deposition was whether he knew what type of plastic the inlet cover was, not whether or not he knew what type of plastics were used in the entire leaf blower or the rest of its components.

Exhibit 2, Deposition of Mel McCarthy, pp. 17- 18.

17. Admitted.

18. Denied. The question asked of Mr. McCarthy during his deposition was whether or not he has been involved in the evaluation or testing of consumer products other than those in litigation. Mr. McCarthy has 30 years of experience as a design and forensic engineer and has consulted on over 2000 forensic projects. Examples of products he has reviewed include an electrical equipment cabinet, a circular saw, a produce peeling machine, a bailing machine, a hamburger patty making machine, a mobile ladder platform, and a mortar mixer. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶¶ 6- 7.*

19. Admitted.

20. Denied. The question asked of Mr. McCarthy during his deposition was whether or not he was involved in the testing AND evaluation of electrical appliances, not whether or not he was involved in the testing OR evaluation of electrical appliances.

Exhibit 2, Deposition of Mel McCarthy, p. 18.

21. Denied. It is unclear what the phrase “involved with litigation” means and no factual support for this assertion is contained within the page cited to by Sears in the deposition of Mel McCarthy.

22. Admitted.

23. Admitted.

24. Denied. Mr. McCarthy has qualified as an expert witness in cases concerning an electrical equipment cabinet, a circular saw, a produce peeling machine, a bailing machine, a hamburger patty making machine, a mobile ladder platform, and a mortar mixer. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶ 7.*

25. Admitted.

26. Admitted.

27. Denied. No factual support for this assertion is contained within the page cited to by Sears in the deposition of Mel McCarthy. One of Mr. McCarthy's seminars included a discussion of handheld power saws, which are small electrical appliances. *Exhibit 2, Deposition of Mel McCarthy, p. 27.*

28. Admitted.

29. Denied. Mr. McCarthy has not written anything specifically dealing with latching devices, but he wrote the text of Chapter 31, *Machine Guarding*, in volume two of four entitled, *The Attorney's Guide to Engineering*, by Kuperstein and Salters, published by Matthew Bender in 1986. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶3 (Exhibit B to Exhibit 1- McCarthy Report, p2(i)).*

30. Denied. The question asked of Mr. McCarthy during his deposition was whether or not he reviewed any authoritative publications or writing in the area of lawn equipment, yard equipment or small electrical appliances, not whether he "reviewed, nor does he possess, any authoritative publications in support of any of his opinions" as cited by counsel for Sears in its statement of facts. *Exhibit 2, Deposition of Mel McCarthy, p. 22.* Mr. McCarthy reviewed and relied on a Safe Design Methodology (Exhibit C to Exhibit 1) which has generally been accepted by consultants, engineers, colleagues, peers

and labs. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶¶10, 11.* He also consulted and relied upon portions from the Accident Prevention Manual for Industrial Operations, published by the National Safety Council. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶19.*

31. Admitted.

32. Admitted.

33. Admitted.

34. Admitted.

35. Denied. Mr. McCarthy was not asked and did not testify that the UL standards are available upon request from UL. Thus, this assertion is unsupported by the testimony cited by counsel for Sears.

36. Denied. This “fact” is a legal conclusion stated by counsel for Sears. The petition filed by Plaintiff in this matter speaks for itself.

37. Admitted.

38. Denied. Mrs. Karl testified that she would look to see if the cover was on the unit before using it and look to see if there was anything broke or missing on the unit. *Exhibit 3, Deposition of Pam Karl, p. 46.*

39. Admitted.

40. Denied. Mrs. Karl and her husband used the device to blow grass and leaves, sometimes on a semi-weekly basis, for approximately an hour at a time. *Exhibit 3, Deposition of Pam Karl, p. 28.*

41. Admitted.

42. Denied.

(i) Denied. The device failed on the day of the accident.

(ii) Admitted.

(iii) Denied. Mrs. Karl did not believe it presented an unreasonable risk prior to the accident (in the years 1994 to 1998). *Exhibit 3, Deposition of Pam Karl, p.23.*

(iv) Admitted.

(v) Denied. Mrs. Karl testified that she never had a problem with the cover coming off during the two years prior to the accident. *Exhibit 3, Deposition of Pam Karl, p.39.*

(vi) Denied. While he had no “problems” per se with the blower, Jamie Karl testified that he was not satisfied with the vacuum portion of the blower. *Exhibit 4, Deposition of Jamie Karl, p. 10.*

(vii) Denied. The cover screw was not in place at the time of accident, and the inlet cover was not closed immediately before Mrs. Karl’s hand entered the motor chamber. *Exhibit 3, Deposition of Pam Karl, pp. 72-73.*

43. Denied. The question asked of Mrs. Karl during her deposition, and cited as support for this factual assertion by counsel for Sears, was “was there anything about the operation of the blower when you used it from 1994, when you purchased it, up until 1998 that you were dissatisfied with.” Counsel for Sears does not limit the time period from 1994 until 1998.

44. Denied. The question asked of Mrs. Karl during her deposition, and cited as support for this factual assertion by counsel for Sears, was “was there anything

about the unit from 1994 to 1998 that you thought was dangerous or hazardous?” Counsel for Sears does not limit the time period from 1994 until 1998.

45. Denied. The leaf blower has an inlet cover that will cover the impeller blades when it is in the fully closed position, not in its open position. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶¶ 3 15, 20.*

46. Denied. The inlet cover screw could vibrate loose, or the user (or different user) could forget to replace the inlet cover screw, all of which would allow the inlet cover to open. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶¶ 12,13.*

47. Denied. The warning on the cover states “do not open cover unless unit is unplugged.” *Exhibit 3, Deposition of Pam Karl, p.42.*

48. Admitted.

49. Admitted.

50. Admitted.

51. Admitted.

52. Admitted.

53. Admitted.

54. Admitted.

55. Admitted.

56. Denied. Sears cites insufficient factual support for this assertion and the deposition testimony cited therein does not use the phrase “which would have permitted her to come into contact with the impeller blades.”

57. Admitted.

58. Admitted.

59. Denied. Sears cites insufficient factual support for this assertion as Mrs. Karl testified that the inlet hinge pin did not appear to be loose, not that it was not actually loose. *Exhibit 3, Deposition of Pam Karl, p.74.*

60. Denied. Plaintiff filed this lawsuit, which is certainly a complaint to Sears about their product.

Plaintiff's Additional Material Facts

1. A true and accurate copy of the curriculum vitae of Mel McCarthy is attached as Exhibit A to Exhibit 1. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶1.*
2. A true and accurate copy of Mel McCarthy's report issued in this matter is attached as Exhibit B to Exhibit 1. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*
3. Mel McCarthy has an accredited degree in Mechanical Engineering majoring in Machine Design that qualifies him to analyze and evaluate the safe design of any mechanical product, including the leaf blower at issue in this matter. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*
4. The qualifications set forth on page 2 of Mel McCarthy's report generally set forth his background, education and experience. His background, education and experience provide him with the ability to evaluate the design of the product in this matter. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*
5. Mr. McCarthy has over 30 years combined experience as a design engineer and as a forensic engineer and has consulted on over 2000 forensic projects, many of which involved the issue of whether or not a product has been properly designed to prevent injury. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*

6. Mr. McCarthy has qualified as an expert witness and testified in court since 1995 regarding a wide variety of products including, but not limited to, an electrical equipment cabinet, a circular saw, a produce peeling machine, a bailing machine, a hamburger patty making machine, a mobile ladder platform, and a mortar mixer. He has reviewed and analyzed numerous products that use electricity to power motors that operate the products and is familiar with use of safety interlock switches in conjunction with safety guards that can be opened. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*
7. The design of a reliable mechanical safety guard for the blades of a leaf blower must prevent contact with the hazard of the leaf blower blades (while rotating at high speed) and it is that aspect of the design of the leaf blower that is at issue in this matter. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*
8. The Sears leaf blower design (1) relies on the continuous presence of a single number eight screw to retain the blade guard, (2) has a blade guard design that will fall open if inadvertently unlatched, (3) has a blade guard with no electrical interlock, as well as (4) places the impeller blades immediately next to the air inlet thus making the leaf blower blade guard design defective and unreasonably dangerous. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*
9. In rendering his opinions in this matter, Mr. McCarthy employed the use of his Safe Design Methodology attached as Exhibit C to Exhibit 1. Such a Safe Design Methodology (Safety Hierarchy) has been generally accepted by consultants, engineers, colleagues, peers and labs as indicated by the references to similar methodologies. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*

10. The attached accepted Safe Design Methodology (Safety Hierarchy) supports Mr. McCarthy's opinion that Sears identified the severe hazard of contact with the rotating blades, step one, but failed to prevent access to that severe hazard, step two, by not designing a reliable blade guard that would prevent the plaintiff from contacting that hazard. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*
11. The fact that a screw without any locking device is capable of vibrating loose is obvious and requires no testing because the sole purpose of screw-locking devices such as lock washers, lock wires and jamb nuts is to prevent screws from vibrating loose. There was no screw-locking device provided for the single screw provided for the blade guard in the design of this product. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*
12. It is reasonably foreseeable that an ordinary user will forget to replace the screw and/or will not notice it is missing during the use of the blower, as the screw is a small screw and, therefore, not conspicuous. The blower will operate with the blade guard screw missing and with the blade guard open exposing the rotating blades for contact. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*
13. The defects in the design of Sears blower are obvious enough to a design engineer such as Mr. McCarthy so it did not require significant time to recognize the defects. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*
14. The defects in the Sears blower were readily observable through photographs of the device that Mr. McCarthy reviewed prior to rendering his opinions in this matter. No testing of the blower was necessary to determine that the blade guard was unreasonably dangerous due to (1) the manner in which the guard opens, (2)

the use of a single guard small screw to hold the guard closed, (3) the lack of any screw-locking device, and (4) the lack of any safety interlock on the guard.

Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.

15. The photographs and users manual for the device Mr. McCarthy reviewed prior to rendering his opinions in this matter were sufficient to display the location of the blades, the location of the blade guard, the location of the guard screw, the size of the guard screw, the lack of any guard screw-locking device, the manner in which the blade guard (cover door) opened, and the lack of any guard interlock switch on the device. His observations and opinions were confirmed by his physical inspection of the device when he was in St. Louis to give deposition testimony.

Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.

16. There is nothing unique about a leaf blower/vacuum unit that would bring the product outside Mr. McCarthy's area of expertise. The danger of rotating impeller blades on the leaf blower was readily apparent in the device to him and to Sears and he did not need any type of specialized training or experience in lawn and garden equipment to recognize this hazard and determine feasible, safe design alternatives to Sears' blower blade guard design. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*

17. Mr. McCarthy has attended seminars that have provided him with additional experience and knowledge regarding safe design to prevent access to mechanical hazards. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*

18. Mr. McCarthy consulted and relied upon portions from the Accident Prevention Manual for Industrial Operations. This manual was published by the National

Safety Council. Its excerpts concerning proper guard design are consistent with his opinions in this matter. The manual states, in part, that guards that can be opened should be designed to be self-closing for safety reasons. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*

19. The Sears blower at issue could have had a self-closing guard by simply placing the hinge pin for the guard cover at the top instead of the bottom, such that gravity would have kept the guard towards a closed position instead of open. This simple design change would have added no additional cost to the blower and would have likely prevented the accident in this case. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*
20. U.L. Standards focus more on electrical safety than on mechanical safety. *Exhibit 1, Affidavit of S. Melville McCarthy, ¶2.*
21. Mr. McCarthy worked as a mechanical engineer designing machines for Tampa Bay Engineering Company from 1969 to 1972. *Exhibit 2, Deposition of S. Melville McCarthy, p.6.*
22. Mr. McCarthy has used and owned leaf blowers. *Exhibit 2, Deposition of S. Melville McCarthy, p.11.*
23. Mr. McCarthy's education included courses in electrical engineering, including motors, and has tested and evaluate electric motors. *Exhibit 2, Deposition of S. Melville McCarthy, pp.24, 31.*
24. There are no safety warnings on the product or in the manual regarding the screw to the inlet cover, and that it needs to be in place in order to operate the unit and

- that it is a safety critical item. *Exhibit 2, Deposition of S. Melville McCarthy, p. 46.*
25. It is unreasonable to expect a consumer to conduct a thorough inspection for every screw and every aspect of the machine. *Exhibit 2, Deposition of S. Melville McCarthy, p. 51.*
26. Mr. McCarthy has performed design and consulting work in the area of latching devices, and has designed latches. *Exhibit 2, Deposition of S. Melville McCarthy, pp. 64, 107.*
27. The inlet cover can come open unintentionally or accidentally if the inlet cover screw is not in place. The inlet cover latch is not shielded or protected against inadvertent contact. *Exhibit 2, Deposition of S. Melville McCarthy, pp. 70, 84.*
28. Mr. McCarthy tested how long it takes for the impeller blades to stop spinning when the power is cut-off to the device. *Exhibit 2, Deposition of S. Melville McCarthy, pp. 85-87.*
29. Other leaf blowers, such as a Toro leaf blower used and owned by Mr. McCarthy, have an electrical interlock system. *Exhibit 2, Deposition of S. Melville McCarthy, pp. 89-91.*
30. The blower should not use a latch at all, but should use multiple screws on the inlet cover, as the latch is misleading to the consumer. *Exhibit 2, Deposition of S. Melville McCarthy, p. 107.*
31. The instruction manual for the product does not mention the inlet cover in the blower section and does not mention the inlet cover screw. *Exhibit 2, Deposition of S. Melville McCarthy, pp. 110-111.*

32. Hardcopies of certain digital photographs of the blower sent to Mr. McCarthy and made part of his file are incorporated into this memorandum. *Exhibit 2, Deposition of S. Melville McCarthy, p. 95.*
33. On or about August 6th, 2000, while Plaintiff was using a leaf blower she purchased from Sears to blow grass/dirt on her driveway, the inlet cover guard failed to remain closed and Plaintiff's hand entered the motor chamber. *Exhibit 3, Deposition of Pamela Karl, 4-6, 48-49, 64-69.*
34. The impeller blades of the motor ripped a ligament in Plaintiff's thumb away from the bone, ultimately requiring Plaintiff to have surgery to reattach the ligament. *Exhibit 5, Deposition of Dr. Paul Manske, pp. 15, 17-18.*
35. The blower at the time of the accident was in substantially the same condition as it was when it was purchased by Plaintiff. *Exhibit 3, Deposition of Pamela Karl, p. 74.*
36. Mrs. Karl's injuries were caused by the accident with the leaf blower. *Exhibit 5, Deposition of Dr. Paul Manske, pp. 15, 17-18.*

Standard of Review

Summary judgment is a harsh remedy that should only be granted when the moving party has established his/her right to judgment with such clarity as not to give rise to controversy. New England Mut. Life Ins. Co. v. Null, 554 F.2d 896, 901 (8th Cir. 1977). In passing on a motion for summary judgment, the court must review the facts in a light most favorable to the party opposing the motion and give that party the benefit of any inferences that logically can be drawn from those facts. Buller v. Buechler, 706 F.2d 844, 846 (8th Cir. 1983). The court is required to resolve all conflicts of evidence in favor

of the nonmoving party. Robert Johnson Grain Co. v. Chem. Interchange Co., 541 F.2d 207, 210 (8th Cir. 1976). As will be shown below, Sears is not entitled to summary judgment in this matter and Sears' motion must be denied.

Argument

1. **Sears' Motion Should Be Denied as Sears Fails to Cite Sufficient Legal Authority to Support Its Motion**

The relevant legal framework for analyzing the admissibility of Mr. McCarthy's testimony is set out in Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 125 L.Ed. 2d 469, 113 S.Ct. 2786 (1993) and Kuhmo Tire Co. v. Carmichael, 526 U.S. 137, 143 L.Ed. 2d 238, 119 S.Ct. 1167 (1999). Other than in the title to its motion, Sears fails to cite to Daubert or explain why Daubert would preclude the admissibility of Mr. McCarthy's testimony in this matter. Nor does Sears come forth with any legal analysis at all to explain why Mr. McCarthy's testimony should be excluded. Sears simply cites what it considers to be numerous "undisputed" facts and then ends its motion with a conclusory outline that fails to cite to any legal authority. This is a wholly insufficient legal basis for this motion and, furthermore, is prejudicial to Plaintiff to the extent that Sears intends to provide legal argument in its reply memorandum. *See* Tenbarge v. Ames Taping Tool Systems, Inc., 128 F.3d 656 (8th Cir. 1997) (grant of summary judgment improper where defendant asserted additional facts by deposition in reply rather than in initial motion as it is prejudicial to plaintiff by depriving plaintiff of opportunity to respond).

Indeed, Sears **cites only one case** in its entire motion - Tyus v. Urban Search Mgmt., 102 F.3d 256, 263 (7th Cir. 1996). Tyus is readily distinguishable from this matter. In Tyus, a Fair Housing case involving race discrimination claims, the plaintiff

retained the services of two experts - a sociologist, to testify about the history and patterns of housing discrimination, and a psychologist, to testify about how an all-white advertising campaign affects African-Americans. Id. at 263. The Court held that the trial court erred in excluding the testimony of both of these experts. Id. at 264. Unlike Tyus, this matter is a products liability case involving expert testimony from a mechanical engineer with over 30 years of design and forensic design experience. Given that Tyus was a Fair Housing case that involved a wholly different field of proposed expert testimony, and that the Court in Tyus held that the trial court erred in excluding the proposed expert testimony, Tyus provides no legal basis for the Court to exclude the testimony of Mr. McCarthy in this matter.

2. Sears' Motion Must Be Denied as Mr. McCarthy is Qualified to Render Expert Testimony in This Matter

This case involves a question as to whether or not a leaf blower/vacuum unit sold by Sears is unreasonably dangerous. In particular, the injuries in this matter occurred due to Plaintiff's hand coming into contact with the spinning impeller blades of the product.

Photos of the product are shown below:





In its normal configuration, the black inlet cover guard shown in the lower left hand photograph is supposed to cover the spinning impeller blades, where air is drawn into the device when it is being used as a blower. The inlet cover opens from the top by releasing a plastic latch and then rotates at its base (where a hinge pin is located) so it “flips open,” with the top of the inlet cover rotating down toward the bottom of the product. There is an opening in the inlet cover for an inlet cover screw (on the right of the cover). At the time of the accident, the inlet cover screw was missing and the inlet cover door opened without the knowledge of the Plaintiff. Plaintiff’s right hand then went inside the motor chamber and was injured by the blades of the impeller, which continued to spin despite the inlet cover being open.

Mr. McCarthy, Plaintiff’s product expert, concluded that the product was defective, based on several design defects in the product:

1. The guard cover utilizes a small screw to keep the guard cover closed. It is reasonably foreseeable that the screw will either vibrate loose over time, or that an ordinary user will forget to replace it. The missing screw is not likely to be noticed as it is small and the same color as the guard cover;

2. The guard cover opens in a manner such that it will fall open, rather than shut, when the screw is missing;
3. The electric motor driving the impeller blades continues to operate even when the guard cover is open. This could be prevented by the use of an electrical interlock switch; and
4. The motor and blades could be moved away from the air inlet opening to limit the ability of the user's hands from contacting the blades.

Mr. McCarthy is well qualified to render these opinions in this matter. First, Mr. McCarthy holds a degree in mechanical engineering, with a major in machine design. He also holds another undergraduate degree in physics and engineering. Mr. McCarthy's education included not only mechanical engineering courses, but also courses in electrical engineering, including motors, and he has tested and evaluated electric motors. Mr. McCarthy has also attended seminars that have provided him with additional experience and knowledge regarding safe design to prevent access to mechanical hazards on products, including seminars on machine guarding, applied system safety, human factors, and product safety warnings.

Second, Mr. McCarthy is a registered professional engineer in three states and has eight years work experience as a machine design engineer and mechanical engineer for two different consulting engineering firms. He also has over 30 years experience as a forensic engineering consultant on over 2000 projects, many of which involved design analysis to determine if the product is properly designed to prevent injury. He has also been a member of several nationally recognized societies, including the American

Society of Mechanical Engineers, the American Society of Safety Engineers, and the National Safety Council, among others.

Third, Mr. McCarthy has qualified as an expert witness and testified in court hundreds of times, and since 1995 has testified regarding a wide variety of products including, but not limited to, an electrical equipment cabinet, a circular saw, a produce peeling machine, a bailing machine, a hamburger patty making machine, a mobile ladder platform, and a mortar mixer. He has reviewed and analyzed numerous products that use electricity to power the product's motors and is familiar with the use of safety interlock switches in conjunction with safety guards that can be opened. He has also owned and operated leaf blowers.

Finally, Mr. McCarthy has additional specialized experience in dealing with guards or latches on machines. Mr. McCarthy even authored the text of Chapter 31, *Machine Guarding*, in volume two of four entitled *The Attorney's Guide to Engineering*, by Kuperstein and Salters, published by Matthew Bender in 1986.

Based on the above, there can be no question that Mr. McCarthy is well suited to analyze the product in question in this matter, and that his specialized knowledge of mechanical engineering, machine design, product safety, and machine guarding will assist the trier of fact in this matter. Arcoren v. U.S., 929 F.2d 1235, 1239 (8th Cir. 1991) (expert is someone who is qualified by 'knowledge, skill, experience, training or education,' quoting Rule 702 Advisory Note); Stull v. Fuqua Industries, Inc., 906 F.2d 1271, 1275 (8th Cir. 1990) (expert's expertise in mechanical engineering qualified him to testify about the workings of a lawn mower and, to some degree, about the interaction between the human body and mower).

Many of Sears' alleged undisputed facts, however, seem to focus on whether Mr. McCarthy has any experience dealing specifically with leaf blowers or lawn and garden equipment. This argument of lack of "specialized" expertise, however, has been repeatedly rejected by federal courts. Smith v. Ford Motor Co., 215 F.3d 713, 720 (7th Cir. 2000) (mechanical engineer qualified to render opinions concerning design of power steering gear boxes, even though not an expert in automotive design, as expert should not be excluded solely because expertise is related to an area other than one concerning the ultimate issue in case); Stagl v. Delta Air Lines, Inc., 117 F.3d 76 (2nd Cir. 1997) (error to exclude testimony of mechanical engineer who lacked experience in airline terminal or baggage claim area design, where expert had expertise in general in the interaction between machines and people); Wheeler v. John Deere Co., 935 F.2d 1090, (10th Cir. 1991) (in a products liability action, expert witness is not strictly confined to his area of practice, but may testify concerning related applications; a lack of specialization does not affect the admissibility of the opinion, but only its weight - accordingly, mechanical engineer allowed to testify as to how consumers will use and perceive equipment); Lavespere v. Niagara Machine & Tool Works, Inc., 910 F.2d 167, 176-77 (5th Cir. 1990) (in products liability action against manufacturer of press brake, witnesses may testify on safety of brake design despite lack of personal design experience); Exum v. General Electric, 819 F.2d 1158, 1163-64 (D.C. Cir. 1987) (registered engineer experienced in industrial safety and product design, but lacking any specific expertise in kitchen design, qualified to testify in product's liability action against manufacturer of industrial fryer); Dixon International Harvester Co., 754 F.2d 573, 580 (5th Cir. 1985) (design engineer may provide expert testimony on safety of crawler tractor in product liability action

against manufacturer despite lack of prior experience approving crawler tractor design); and Martin v. Fleissner GMBH, 741 F.2d 61, 64 (4th Cir. 1984) (mechanical engineers were qualified to present expert testimony in product liability action against manufacturer of synthetic fiber crimper although they lacked previous background in either crimpers or the textile industry).

Finally, Sears' "specialization" argument must be rejected because Mr. McCarthy does have specialized experience in machine guards, and this is precisely the specific design problem at issue with the leaf blower - were the spinning impeller blades properly guarded? Not only does Mr. McCarthy's major in machine design as part of his mechanical engineering education render him qualified to testify concerning the guards in place on the blower, it is clear that Mr. McCarthy has specialized experience in machine guards. Indeed, as pointed out above, Mr. McCarthy has even been published in this area.

Furthermore, there is nothing unique about a leaf blower/vacuum unit that would bring the product outside Mr. McCarthy's area of expertise. The danger of rotating impeller blades on the leaf blower was readily apparent in the device to him and to Sears and he did not need any type of specialized training or experience in lawn and garden equipment to recognize this hazard and determine a feasible, safe design alternative to Sears' blower blade guard design. Accordingly, this Court should find Mr. McCarthy qualified to render his opinions in this matter.

3. Sears' Motion Must be Denied as Mr. McCarthy's Opinions Are Reliable and Supported by the Evidence

In order to be admissible, Mr. McCarthy's opinions must satisfy three general prerequisites: (1) the evidence must be useful to the finder of fact in deciding the ultimate issue of fact; (2) the proposed witness must be qualified to assist the finder of fact; and

(3) the proposed evidence must be reliable or trustworthy in an evidentiary sense.”

Lauzon v. Senco Products, Inc., 270 F.3d 681, 686 (8th Cir. 2001). As discussed above, Mr. McCarthy is well qualified to assist the finder of fact in this matter. Nor can there be any question that his opinions in this matter will help the jury, as his opinions point out specific design safety issues presented by the blower, as well as reasonable design alternatives.

Finally, Mr. McCarthy’s opinions are reliable and trustworthy. First, Mr. McCarthy’s opinions in this matter are derived from his use of the Safe Design Methodology, which is a widely recognized safety design hierarchy to be used when designing products. Mr. McCarthy’s safe design methodology is derived from widely accepted guarding guidelines, including the *Model Code of Safety Regulations for Industrial Establishments for the Guidance of Governments and Industry*, the *Accident Prevention Manual for Industrial Operations* issued by the National Safety Council, the Federal Regulations codified in 29 CFR, 1910.212, OSHA’s *General Requirements for All Machines*, *A Product Safety Checklist for Design Engineering Management*, and other published sources. The full list of references may be found in Exhibit C to Exhibit 1, Safe Design Methodology, Safety Hierarchy.

Mr. McCarthy also consulted and relied upon portions from the Accident Prevention Manual for Industrial Operations in developing his opinions. This manual was published by the National Safety Council. Its excerpts concerning proper guard design are consistent with and support Mr. McCarthy’s opinions in this matter. The manual states, in part, that guards that can be opened should be designed to be self-closing for safety reasons.

Thus, Mr. McCarthy's methodology and opinions in this matter are clearly consistent with the Daubert factors of peer review, publication, and acceptance. *See Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 125 L.Ed. 2d 469, 113 S.Ct. 2786 (1993) and Kuhmo Tire Co. v. Carmichael, 526 U.S. 137, 143 L.Ed. 2d 238, 119 S.Ct. 1167 (1999).

Finally, Mr. McCarthy's opinions are based on solid evidentiary facts in this matter. Mr. McCarthy will testify that the Sears leaf blower design (1) relies on the continuous presence of a single number eight screw to retain the blade guard, (2) has a blade guard design that will fall open if inadvertently unlatched, (3) has a blade guard with no electrical interlock, as well as (4) places the impeller blades immediately next to the air inlet thus making the leaf blower blade guard design defective and unreasonably dangerous. All of these facts can be verified by a physical observation of the blower and do not require any theory or testing² to determine.

In particular, it is undisputed that the photographs and users manual for the device Mr. McCarthy reviewed prior to rendering his opinions in this matter were sufficient to display the location of the blades, the location of the blade guard, the location of the guard screw, the size of the guard screw, the lack of any guard screw-locking device, the manner in which the blade guard (cover door) opened, and the lack of any guard interlock switch on the device. These observations and opinions were confirmed by his physical inspection of the device when he was in St. Louis to give deposition testimony.

² It is also undisputed that a screw without any locking device is capable of vibrating loose, as the sole purpose of screw-locking devices such as lock washers, lock wires and jamb nuts is to prevent screws from vibrating loose. There was no screw-locking device provided for the single screw provided for the blade guard in the design of this product. Nor is testing always required to satisfy the requirements of *Daubert*. Clark v. Chrysler Corp., 310 F.3d 461 (6th Cir. 2002).

Mr. McCarthy will also testify that it is reasonably foreseeable that an ordinary user will forget to replace the screw and/or will not notice it is missing during the use of the blower, as the screw is a small screw and, therefore, not conspicuous. The blower will operate with the blade guard screw missing and with the blade guard open exposing the rotating blades for contact. Again, these opinions are not based on any speculative scientific theory, but are concretely tied back to the physical design of the leaf blower in this matter.

In light of the above, this Court should allow Mr. McCarthy's opinions in this matter and deny Sears' motion.

4. Summary Judgment Is Improper as Plaintiff Has Come Forth With Facts Sufficient to Establish Sears' Liability in This Matter

Under Missouri law, in order to recover under the theory of strict liability for defective design, a plaintiff must demonstrate that the product, as designed, is unreasonably dangerous and therefore defective, and that the demonstrated design defect caused his/her injuries. Jones v. Ryobi, Ltd., 37 F.3d 423, 425 (8th Cir. 1994). There is no question that Plaintiff has come forth with sufficient facts to establish liability by Sears in this matter and preclude summary judgment. Specifically, Plaintiff has presented the following evidence:

- (1) Plaintiff purchased the leaf blower at a Sears store in Crestwood, Missouri;
- (2) The leaf blower as designed and sold to Plaintiff was unreasonably dangerous when put to a reasonably anticipated use (e.g. blowing grass), as it suffers from the following design defects:

- A. The guard cover utilizes a small screw to keep the guard cover closed. It is reasonably foreseeable that the screw will either vibrate loose over time, or that an ordinary user will forget to replace it. The missing screw is not likely to be noticed as it is small and the same color as the guard cover;
 - B. The guard cover opens in a manner such that it will fall open, rather than shut, when the screw is missing;
 - C. The electric motor driving the impeller blades continues to operate even when the guard cover is open. This could be prevented by the use of an electrical interlock switch; and
 - D. The motor and blades could be moved away from the air inlet opening to limit the ability of the user's hands from contacting the blades.
- (3) Plaintiff was injured when she was using the device to blow grass/dirt;
- (4) Plaintiff's injuries are a direct result of the design defects of the leaf blower.

In light of the above, Sears' request for summary judgment in this matter should be denied.

Conclusion

Sears failed to provide this Court with any legal analysis in its motion that would justify either excluding the testimony of Mel McCarthy or entering summary judgment in favor of Sears. In addition, the material facts in this matter clearly establish that Sears sold a defectively designed product to Plaintiff, who suffered serious injuries as a result of the defective design. Accordingly, this Court should deny Sears' motion.

WHEREFORE Plaintiff Pamela S. Karl moves this Court to deny Defendant's *Daubert*/Summary Judgment Motion in its entirety, and to enter such further and other relief this Court deems just and proper.

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that this 3rd day of December the foregoing was filed electronically with the Clerk Court to be served by operation of the Court's electronic filing system upon: Louis J. Basso, Basso, Krupp & Myers, P.C., 13537 Barrett Parkway Drive, Suite 300, St. Louis, Missouri 63021, attorney for Defendant.

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